

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2004/001546

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H01L 33/00, H01L 21/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C23C H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Patents and application for inventions, since 1973

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
IEEE Xplore, Google : keyword : "ZnO, MOCVD, nano "

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SRIRAM MUTHUKUMAR et al." Selective MOCVD Growth of ZnO Nanotips " IEEE Transactions on Nanotechnology, Vol. 2 No.1, pp50-54, MARCH 2003 see the full text	1-11
A	EP 1258928 A1 (JAPANESE SCIENCE AND TECHNOLOGY CORPORATION) 20 NOVEMBER 2002 see the whole documents	1-11
A	KR 2001-70678 A (KIM, YOUNG-CHANG et. al) 27 JULY 2001 see the whole documents	1-11
T	ZHONG J ct. al. " ZnO nanotips grown on Si substrates by Metal-Organic Chemical-Vapor Deposition " Journal of Electronic Materials, Vol.33 No. 6 , pp 654-657, 01 June 2004 see the abstract	1-11

Further documents are listed in the continuation of Box C.

See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search
23 SEPTEMBER 2004 (23.09.2004)

Date of mailing of the international search report
24 SEPTEMBER 2004 (24.09.2004)

Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT
Information on patent family members

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PCT/KR2004/001546

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1258928 A1	20.11.2002	JP 2001-210864 A US 2003/0132449 A1	03.08.2001 17.07.2003
KR 2001-70678 A	27.07.2001	NONE	